

Research Article

The Correlation between Rooming-in and the Level of Independence of Postpartum Mothers in Caring for Newborns in the Inpatient Room of RSU Bali Royal

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ABSTRACT

Introduction: Rooming-in, or co-hospitalisation, is designed to teach postpartum mothers how to independently care for their newborns, recognise their babies' responses, and establish a strong bond. This approach is particularly crucial for mothers who exclusively breastfeed. This study aimed to determine the correlation between rooming-in and the level of independence of postpartum mothers in caring for their newborns at RSU Bali Royal, emphasising the importance of health education regarding postnatal care.

Methods: This quantitative study employed an observational, analytical, and descriptive design with a cross-sectional approach. The sample comprised all postpartum mothers who gave birth at Bali Royal General Hospital and met the inclusion criteria. A total of 92 respondents were included. Data were collected using a detailed questionnaire and analysed using the Spearman Rank Test.

Results: The study found that 53.3% of the respondents required assistance in caring for their newborns. The correlation value of 0.784 indicated a strong relationship between rooming-in and the level of independence of postpartum mothers.

Conclusion: There is a strong correlation between rooming-in and the independence level of postpartum mothers in caring for newborns at RSU Bali Royal. Promoting rooming-in practices can significantly enhance the independence of postpartum mothers.

Keywords: *Independence, Postpartum, Rooming-in*

Introduction

Mothers who have recently given birth (postpartum mothers) require an approach to independently caring for their newborns. Rooming-in is an approach aimed at empowering postpartum mothers to care for their

newborns independently [1]. The level of independence of postpartum mothers is very important, especially when performing postpartum care independently [2]. This is crucial for achieving postpartum recovery, particularly by supporting the health of their babies [3].

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Rooming-in is a care method where the mother and newborn are not separated but placed in the same room or space together for a full 24 hours a day. In its implementation, the baby must always be beside the mother until they are allowed to go home. Rooming in is very beneficial for both the mother and the baby. It is intended to enhance the bond between mother and baby, provide comfort to the baby, and support the process of exclusive breastfeeding [4]. The mother can learn to independently care for her baby and recognise the baby's responses, such as hunger or sleepiness. This care includes umbilical cord care, bathing the baby, breastfeeding, and changing the baby's diaper [5].

The implementation of rooming-in is not fully practiced in health care facilities for mothers and babies after delivery. Sometimes, separation between mother and baby still occurs after delivery due to several reasons or conditions that do not allow for rooming-in, such as exhaustion after delivery, the effects of anaesthesia like nausea and vomiting, or the mother needing to be treated in an intensive care unit due to certain conditions [6].

In Indonesia, the rate of rooming-in and early initiation of breastfeeding (EIB) is 58.2%. In Bali, out of 1,115 births, 41.9% (468) of mothers performed EIB and rooming-in, which is relatively low compared to other provinces. In Jakarta, EIB and rooming-in are at 74.1%, in East Java at 63.7%, and in Yogyakarta at 68.5%. EIB involves skin-to-skin contact between the mother and baby as soon as possible, within 1 hour after birth [7].

A preliminary study conducted by the author on April 6, 2022, at Bali Royal General Hospital found that the rooming-in protocol has been implemented. Of the total deliveries, only 10% of postpartum mothers practiced full rooming-in, 85% practiced partial rooming-in, and 5% did not practice rooming-in at all. Partial rooming-in was common due to various reasons, including exhaustion after delivery, mothers being unable to be active due to surgical wound pain, or the delay in breast milk production. Mothers who did not practice rooming-in were often due to the baby's unstable

condition requiring close monitoring, such as babies born with PDA, low birth weight, asphyxia, or hypothermia.

During the implementation of rooming-in, whether full or partial, newborn care is often not performed by the mother but is handed over to family members such as the baby's father, grandmother, or even a babysitter. This leads to a lack of independence for the mother in caring for her baby.

Research Objective

The general objective of this study is to determine the relationship between rooming-in and postpartum mothers' independence in caring for newborns in the inpatient ward of Bali Royal General Hospital.

Method

Study design

This research used a quantitative study with a descriptive-analytic observational design. The study included all postpartum mothers who gave birth at Bali Royal General Hospital during the study period and met the inclusion criteria.

Sample

The sample size was 92 individuals. The study was conducted in the inpatient ward of Bali Royal General Hospital from December 1 to December 31, 2022.

The inclusion criteria were postpartum mothers who delivered via cesarean section during the study period and who were willing to participate as respondents. Meanwhile, the exclusion were mothers with critical health conditions that prevent active participation and newborns requiring intensive care are not allowed rooming-in.

Instruments

Rooming In Questionnaire

In this variable, there are 3 statements that must be checked (√) in one of the columns according to the condition of the postpartum mother. Each column will represent the postpartum mother's statement, whether full rooming in, partial rooming in, or not rooming in.

Questionnaire on the level of independence of postpartum women

The questionnaire for the level of independence of postpartum women was taken from Nawati's research in 2016 with the title Relationship between Parirtas status and the level of independence of spontaneous postpartum mothers in self-care and babies at PMI Bogor Hospital [8]. In this variable, there are 14 questions with a score of 0: unable to perform independent activities; score 1: with assistance; and score 2: independent. If the results obtained are 0–9, then the level of dependence is full; the results of 10–19 are partially dependent; and the results of 20–28 postpartum women are independent.

Validity and reliability

The validity and reliability tests in this study used a questionnaire. The questionnaire was tested beforehand to determine its suitability for use in the research. The validity and

reliability tests were conducted at Mangusada General Hospital, Badung, in October 2022, with a total of 92 respondents. From six questions on rooming-in and 14 questions on the level of independence, the results showed that the questionnaire was valid and reliable. The corrected item-total correlation values for all items were greater than 0.3, and the Cronbach's alpha values were 0.880 and 0.905.

Data collection

Data collection was performed using a detailed questionnaire, and analysis was conducted using the Spearman Rank Test.

Ethical considerations

Ethical approval was obtained from the ethics committee of RSU Bali Royal. Informed consent was secured from all participants, ensuring confidentiality and the right to withdraw from the study at any time.

Results

Respondent Characteristics

Table 1. Frequency Distribution of Respondents

| Characteristics | Frequency (n) | Percentage (%) |
|-----------------------|---------------|----------------|
| Gravida | | |
| Primigravida | 34 | 37,0 |
| Multigravida | 58 | 63,0 |
| Rooming in | | |
| Not rooming in | 24 | 26,1 |
| Partial rooming in | 35 | 38,0 |
| Full rooming in | 33 | 35,9 |
| Level of Independence | | |
| Not capable | 39 | 42,4 |
| With assistance | 49 | 53,3 |
| Independent | 4 | 4,3 |

Based on Table 1, it can be seen that out of 92 respondents, the majority were multigravida (63%), partial rooming-in

category (38%), and independence with assistance (53.3%).

Table 2. Relationship Between Rooming-In and the Level of Independence of Postpartum Mothers in Caring for Newborns

| Rooming in | Level of Independence | | | | | | Sprearman rho | P |
|--------------------|-----------------------|------|-----------------|------|-------------|-----|------------------|-------|
| | Not capable | | With assistance | | Independent | | | |
| | f | % | f | % | f | % | | |
| Not rooming in | 24 | 29,1 | 0 | 0 | 0 | 0 | | |
| Partial rooming in | 15 | 16,3 | 20 | 21,7 | 0 | 0 | | |
| Full rooming in | 0 | 0 | 29 | 31,5 | 4 | 4,3 | 0,784 | 0,000 |

The analysis results indicated a p-value of 0.000, which means a p-value < 0.05. Thus, the hypothesis in this study is accepted, showing that there is a statistically significant relationship between rooming-in and the level of independence of postpartum mothers in caring for newborns in the inpatient ward of RSU Bali Royal. The correlation value of 0.784 indicates a strong relationship. Therefore, it can be interpreted that there is a strong relationship between rooming-in and the level of independence of postpartum mothers in caring for newborns in the inpatient ward of RSU Bali Royal.

Discussion

Rooming-In for Postpartum Mothers in Caring for Newborns in the Inpatient Ward at RSU Bali Royal

Based on the research results, it can be seen that out of 92 respondents studied, the majority are in the partial rooming-in category, with 35 respondents (38%). This study illustrates that postpartum mothers caring for newborns in the inpatient ward at RSU Bali Royal have not fully implemented the method where the mother and newborn are not separated but instead are placed in the same room, sharing a space for a full 24 hours each day. Oktinigrum's (2022) research revealed that out of 65 mother respondents participating in rooming-in, 58 (89.20%) followed the rooming-in procedure, while 7 (10.80%) did not [9].

According to the researchers, the varied results in the Bali Royal Hospital study may be due to the fact that most postpartum mothers are primigravida, resulting in less experience with newborns. Additionally, the physical condition of postpartum mothers may not yet allow for full rooming-in, as they may not be able to provide breast milk effectively, have low milk production, need assistance with

breastfeeding to meet the baby's nutritional needs, or are too exhausted from childbirth. Some patients did not participate in rooming-in due to conditions such as asphyxia, low birth weight, or prematurity in their newborns, necessitating intensive care in a separate room. During the study, the primary reason for not rooming in was a positive antigen swab result for the mother before delivery, preventing rooming in until the mother's PCR swab result was obtained.

Level of Independence of Postpartum Mothers in Caring for Newborns in the Inpatient Ward at RSU Bali Royal

The research results show that out of 92 respondents studied, the majority are in the category of independence with assistance, with 49 respondents (53.3%). This indicates that postpartum mothers in the inpatient ward at RSU Bali Royal have a moderate level of independence in caring for newborns. Maulizar et al. (2021) found that the independence of postpartum mothers in the Kutablang Health Centre area, Bireuen District, was mostly in the moderate category, with 29 people (46.8%) [10].

Independence is a psychosocial ability characterised by the courage, initiative, and responsibility to overcome obstacles or problems with confidence, without relying on others' abilities, and the ability to control and determine oneself without the influence or help of others [11]. According to Maryam (2015), independence is the ability to take the initiative, overcome obstacles or problems, have self-confidence, and do things independently without others' assistance [12]. Independence is the ability to perform daily activities or tasks according to developmental stages and capacity [13]. Independence is a cumulative

attitude developed during growth, where individuals continually learn to be self-reliant in facing various situations in their environment, enabling them to think and act independently.

According to the researchers, the varied levels of independence among postpartum mothers in the inpatient ward at Bali Royal Hospital may be due to the majority being young and primigravida, suggesting a lack of experience. A mother is usually around 20 years old or more that the age range of 20–40 years represents a period of physical, mental, and social maturity, driving the motivation to maintain the child's growth and health [14].

Parity influences a mother's experience in childrearing. The knowledge and skills gained provide the ability to make decisions, manifesting as a scientific reasoning process. Higher parity impacts a mother's experience caring for children [15].

This aligns with Adiputra and Kusthina (2018), who noted that past experiences allow mothers, especially multiparas, to learn how to care for themselves during the postpartum period. Multiparous mothers are more realistic in anticipating physical limitations and can adapt more easily to roles and social interactions. Postpartum depression is more common in primiparas, as childbirth is a first-time experience, and also in multiparas with a history of postpartum depression [16].

Relationship Between Rooming-In and the Level of Independence of Postpartum Mothers

The analysis results show that the p-value is 0.000, meaning that the p-value < 0.05. Therefore, the hypothesis in this study is accepted, indicating a statistically significant relationship between rooming-in and the level of independence of postpartum mothers in caring for newborns in the inpatient ward at RSU Bali Royal. The correlation value of 0.784 indicates a strong relationship. Thus, it can be interpreted that there is a strong relationship between rooming-in and the level of independence of postpartum mothers in caring for newborns in the inpatient ward at RSU Bali Royal.

Pakelo found that most respondents who practiced rooming-in, totaling 28 respondents,

achieved an independence rate of 87.5%. The conclusion was that there is a relationship between rooming-in and the level of independence of primiparous mothers in caring for newborns in Gorontalo City, based on the Fisher's Exact Test alternative test, which yielded a p-value of 0.000 [17].

Rooming-in facilitates early infant-mother bonding due to body contact between the mother and baby, significantly influencing the baby's psychological development. A mother's body warmth provides essential mental stimulation for the baby [18]. Independence is a psychosocial ability characterised by the courage, initiative, and responsibility to overcome obstacles or problems with confidence, without relying on others' abilities, and the ability to control and determine oneself without the influence or help of others [11].

The study results indicate that postpartum mothers who do not practice rooming-in tend to be less capable, whereas those who fully practice rooming-in tend to be more independent. The findings show that partial rooming-in is often chosen due to various reasons, such as exhaustion after childbirth, postoperative pain, or insufficient breast milk production. Mothers who do not participate in rooming-in typically have newborns requiring close monitoring for conditions like PDA, low birth weight, asphyxia, or hypothermia, or the mothers have tested positive on an antigen swab before delivery, preventing rooming-in until the mother's PCR swab result is obtained [19].

The relationship between rooming-in and independence is significant because postpartum mothers, after leaving the hospital, become more trained in baby care. Mothers can exclusively breastfeed, care for their babies independently, and communicate with them, fostering a strong emotional bond between mother and baby [20].

Limitations

The study was limited to a single hospital, which may not be representative of other settings. The study did not account for the psychological state of mothers, which could influence their independence levels.

Implications

The findings suggest that implementing rooming-in policies can significantly improve postpartum mothers' independence in caring for their newborns. Hospitals should promote rooming-in practices and provide adequate support to mothers to enhance their confidence and competence in newborn care.

Conclusion

The study concludes that rooming-in is strongly correlated with higher levels of independence among postpartum mothers in caring for their newborns. Health care facilities should encourage rooming-in to foster maternal independence and enhance the mother-infant bond.

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